Supreme Court, U.S.
FILED
JUN 24 2005
OFFICE OF THE CLERK

No. 05-1

In The
Supreme Court of the United States

BARBARA MCFARLAND, individually and on behalf of all persons similarly situated in the State of Florida, *et al.*,

Petitioners,

v.

CHEMINOVA, INC., *et al.*,

Respondents.

On Petition For A Writ Of Certiorari To The United States Court Of Appeals For The Eleventh Circuit

PETITION FOR A WRIT OF CERTIORARI

JOHN G. CRABTREE
Counsel of Record
THE FLORIDA APPELLATE ALLIANCE, P.L.C.
328 Crandon Boulevard
Suite 225
Key Biscayne, Florida 33149
Telephone (305) 361-3770

JOHN S. MILLS
TRACY S. CARLIN
THE FLORIDA APPELLATE ALLIANCE, P.L.C.
865 May Street
Jacksonville, Florida 32204
Telephone (904) 350-0075

SHANNON MCLIN CARLYLE
THE FLORIDA APPELLATE ALLIANCE, P.L.C.
La Plaza Grande
Professional Center
20 La Grande Boulevard
The Villages, Florida 32159
Telephone (352) 259-8852

GLADSTONE N. JONES, III
SPIRO J. VERRAS
KEVIN E. HUDDELL
JONES, VERRAS & FREIBERG, L.L.C.
601 Poydras Street, Suite 2655
New Orleans, Louisiana 70130
Telephone (504) 523-2500

Counsel for Petitioners

COCKLE LAW BRIEF PRINTING CO. (800) 225-6964
OR CALL COLLECT (402) 342-2831

QUESTIONS PRESENTED

Differential diagnosis is a scientific method used by medical professionals to diagnose the cause of an illness, injury, or disease by process of elimination. The circuits are split 5-3 as to whether an expert's testimony based on differential diagnosis alone is admissible evidence of causation. The questions presented in this case are:

1. Under *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993), must an expert base his or her opinion on more than differential diagnosis for the opinion to be sufficiently reliable as evidence of causation?

2. If so, did the Petitioners' experts have a sufficient additional basis to render their opinions of causation sufficiently reliable as evidence of causation?

PARTIES TO THE PROCEEDING IN THIS COURT

In addition to the persons named in the caption, the petitioners in this proceeding are Gino Gavoni, Sr., Lisa Gavoni, both individually and as parents, natural guardians and next of friend of Victoria Gavoni and Gino Gavoni, Jr., both minors, and on behalf of all persons similarly situated in the State of Florida, Michael Anolfo, individually and as parent, natural guardian and next friend of Courtney Anolfo, a minor, and on behalf of all persons similarly situated in the State of Florida, Angelina Des Austelles, individually and on behalf of all persons similarly situated in the State of Florida, and Mark Knierim, individually and on behalf of all persons similarly situated in the State of Florida.

In addition to the persons named in the caption, the respondents in this proceeding are Cheminova A/S, as successor to Cheminova Argo A/S, and Auriga Industries A/S, as successor to Cheminova Holding A/S.

TABLE OF CONTENTS

	Page
QUESTIONS PRESENTED	i
PARTIES TO THE PROCEEDING IN THIS COURT	ii
TABLE OF CONTENTS	iii
TABLE OF AUTHORITIES	iv
PETITION FOR A WRIT OF CERTIORARI	1
OPINIONS BELOW	1
JURISDICTION	1
STATEMENT	1
A. Facts of this Case	3
B. The Court of Appeals' Decision	4
REASONS FOR GRANTING THE PETITION	6
I. The Circuits Are Split 5-3 Over Whether A Differential Diagnosis Opinion Is Reliable Without Additional Scientific Support	6
II. The Conflict Is Important	9
III. The Court Of Appeals' Affirmance Depends On The Resolution Of The Questions Presented	11
CONCLUSION	13

TABLE OF AUTHORITIES

Page

CASES:

Baker v. Dalkon Shield Claimants Trust,
156 F.3d 248 (CA1 1998) 1

Black v. Food Lion,
171 F.3d 308 (CA5 1999) 8

Bonner v. ISP Technologies, Inc.,
259 F.3d 924 (CA8 2001) 7

Brown v. Southeastern Penn. Transp. Auth. (In re Paoli R.R. Yard PCB Litig.),
35 F.3d 717 (CA3 1994) 7

Cassisi v. Maytag Co.,
396 So. 2d 1140 (Fla. Dist. Ct. App. 1981) 5, 12

Clausen v. M/V NEW CARISSA,
339 F.3d 1049 (CA9 2003) 9

Daubert v. Merrell Dow Pharm.,
509 U.S. 579 (1993) 2, 4, 6

Glaser v. Thompson Med. Co.,
32 F.3d 969 (CA6 1994) 1

Hardyman v. Norfolk & W. Ry. Co.,
243 F.3d 255 (CA6 2001) 7

ISK Biotech Corp. v. Douberly,
640 So. 2d 85 (Fla. Dist. Ct. App. 1994) 12

Kannankeril v. Terminix Int'l, Inc.,
128 F.3d 802 (CA3 1997) 7

Kennedy v. Collagen Corp.,
161 F.3d 1126 (CA9 1998), *cert. denied*,
526 U.S. 1099 (1999) 7

Moore v. Ashland Chem. Inc.,
151 F.3d 269 (CA5 1998) 8

TABLE OF AUTHORITIES – Continued

Page

Norris v. Baxter Healthcare Corp.,
397 F.3d 878 (CA10 2005) 8

Rider v. Sandoz Pharm. Corp.,
295 F.3d 1194 (CA11 2002) 2, 6

Rink v. Cheminova, Inc.,
400 F.3d 1286 (CA11 2005) 1

Westberry v. Gislaved Gummi AB,
178 F.3d 257 (4th Cir.1999) 6, 7

STATUTES:

28 U.S.C. §1254(1) 1

OTHER AUTHORITIES:

Differential Diagnosis and Proof of Toxic Injury,
3/31/2003 N.Y.L.J. 3 (col. 1) 9

Edward J. Imwinkelried, *The Admissibility and Legal Sufficiency of Testimony About Differential Diagnosis (Etiology): Of Under- and Over-Estimations*, 56 BAYLOR L. REV. 391, 395-96 (2004) 9

Jack E. Karnes, *Establishing the Standard for a Physician's Patient Diagnosis Using Scientific Evidence: Dealing with the Split of Authority Amongst the Circuit Courts of Appeal*, 15 B.Y.U. J. PUB. L. 1 (2000) 9

John R. Henderson et al., *How "Reliable" Should a Physician's Diagnosis Be? Circuits Disagree Over Whether a Doctor's Causation Testimony Must Satisfy the Daubert Test*, NAT'L L.J., May 29, 2000, at B18-19 10

TABLE OF AUTHORITIES – Continued

Page

The Admissibility of Differential Diagnosis Testimony to Prove Causation in Toxic Tort Cases: The Interplay of Adjective and Substantive Law, 64 LAW & CONTEMP. PROBS. 107, 122 (Aug. 2001) 9

William C. Smith, *No Escape from Science*, 86 A.B.A. J. 60, 66 (Aug. 2000) 9

PETITION FOR A WRIT OF CERTIORARI

OPINIONS BELOW

The opinion of the court of appeals (App., *infra*, 1a-20a) is reported at *Rink v. Cheminova, Inc.*, 400 F.3d 1286, 1288 (CA11 2005). The district court's order granting summary judgment (App., *infra*, 23a-25a) is unreported.

JURISDICTION

The court of appeals entered its judgment on February 24, 2005. (App., *infra*, 2a) This Court granted a 30-day extension of time for filing the petition on May 17, 2005. Order No. 04A968. The jurisdiction of the Court is invoked under 28 U.S.C. §1254(1) (2005).

STATEMENT

Differential diagnosis is a "standard diagnostic tool used by medical professionals to diagnose the most likely cause or causes of illness, injury and disease." *Glaser v. Thompson Med. Co.*, 32 F.3d 969, 978 (CA6 1994). Experts use this technique to identify the possible causes of a medical problem and then systematically eliminate them until the most probable one is isolated. *Baker v. Dalkon Shield Claimants Trust*, 156 F.3d 248, 252-53 (CA1 1998). This toxic tort case presents a well-established, multi-circuit conflict over whether a medical expert may offer an admissible opinion on causation where his or her opinion is based solely on differential diagnosis. Some circuits hold

such an opinion may be admissible, while others hold that in the absence of some additional basis for the opinion, it is not admissible.

The Eleventh Circuit hinted at its position in this split in *Rider v. Sandoz Pharmaceuticals Corp.*, 295 F.3d 1194 (CA11 2002). In the course of holding that brief physician case reports of anecdotal evidence did not pass *Daubert* review, the court suggested that something more is required as support of an opinion to make it admissible on the issue of causation:

> Some case reports do contain details of the treatment and differential diagnosis. Even these more detailed case reports, however, are not reliable enough, by themselves, to demonstrate the causal link the plaintiffs assert that they do because they report symptoms observed in a single patient in an uncontrolled context. They may rule out other potential causes of the effect, but they do not rule out the possibility that the effect manifested in the reported patient's case is simply idiosyncratic or the result of unknown confounding factors. As such, while they may support other proof of causation, case reports alone ordinarily cannot prove causation.

Id. at 1199.

In the case at bar, the Eleventh Circuit expanded on this language to establish its adherence to a rule that differential diagnosis, without more, cannot support an expert's opinion of causation in a toxic tort case.

A. Facts of this Case

Petitioners ("Plaintiffs") are Florida citizens alleging that they have been injured by Fyfanon, a pesticide manufactured, stored, and distributed by the Respondents ("Defendants"). State and federal government agencies had purchased the Fyfanon from the Defendants and engaged in a program of aerial and ground spraying of this pesticide to eradicate Mediterranean fruit flies ("medflies") in Florida. (App., *infra*, 3a.)

Shortly after the agencies began spraying Fyfanon, the Plaintiffs became seriously ill. They filed suit in their individual capacities and on behalf of other similarly situated individuals. (App., *infra*, 4a.) The Plaintiffs sued the Defendants for products liability, negligence, and toxic trespass claims as a result of their exposure to Fyfanon. (App., *infra*, 4a.)

Fyfanon is the Defendants' trade name for the common pesticide malathion. (App., *infra*, 3a.) The Plaintiffs alleged that the Fyfanon sold by the Defendants was defective because it contained elevated levels of isomalathion as a result of the Defendants' improper storage of the pesticide at temperatures above that recommended by the United States Environmental Protection Agency. (App., *infra*, 4a.) Isomalathion is a chemical derivative of malathion that renders the pesticide particularly toxic to humans. (App., *infra*, 4a.)

Before trial, the Defendants moved to exclude the testimony of the Plaintiffs' experts on the issue of causation and for summary judgment. (App., *infra*, 6a-7a.) The Plaintiffs offered two kinds of expert testimony on causation: (1) the opinion of a chemical engineer (Jack Matson, Ph.D.) that the Fyfanon had been stored at improper

temperatures and (2) the opinions of three medical doctors—a medical toxicologist and clinician (Dr. William Meggs), a pulmonologist (Dr. Leonard Cosmo), and a clinical neurologist (Dr. Terry Himes)—that, based on differential diagnosis analysis, the Plaintiffs' injuries were caused by exposure to isomalathion. (App., *infra*, 4a-6a; Eleventh Circuit Record 564:131-32, 566:53-56, 71-73, 562:172-210.)

The district court focused its analysis on the reliability of Dr. Matson's opinions regarding the Defendants' storage of Fyfanon and made no findings with respect to the reliability of the opinions of the medical experts that were based on differential diagnosis. (App., *infra*, 23a-24a.) The district court first held that Dr. Matson's testimony was not admissible under *Daubert v. Merrell Dow Pharm.*, 509 U.S. 579 (1993). (App., *infra*, 23a.) Without this testimony, the district court held that the Plaintiffs could not prove the isomalathion levels in the Fyfanon to which the Plaintiffs were exposed. (App., *infra*, 24a.)

The court then held that without evidence of the dosage level of isomalathion, the testimony of the medical experts must be excluded as well. (App., *infra*, 24a, 27a-38a.) The court rejected the Plaintiffs' argument that differential diagnosis testimony alone can be admissible to prove causation. (App., *infra*, 27a-38a.) This left the Plaintiffs without admissible evidence of causation, so the district court granted summary judgment to the Defendants. (App., *infra*, 24a.)

B. The Court of Appeals' Decision

On appeal, the Plaintiffs argued that Dr. Matson's testimony satisfied *Daubert*, but even if it did not, the

testimony of their medical experts did. (App., *infra*, 14a-17a.) In affirming, the court of appeals devoted the bulk of its opinion to whether the trial court properly excluded Dr. Matson. (App., *infra*, 8a-14a.) This petition does not address that issue. Instead, the focus of the Plaintiffs' argument here is that the expert testimony of their medical experts, Drs. Meggs, Cosmo, and Himes, should have been accepted as sufficiently reliable under *Daubert* to be admissible as proof of causation.

The court of appeals initially indicated that the medical experts' testimony was "irrelevant" because it did not establish "that the Fyfanon was defective or negligently handled in the first place." (App., *infra*, 15a-16a.) It recognized in a footnote, however, that Florida law "obviates the need to prove a defect" because under *Cassisi v. Maytag Co.*, 396 So. 2d 1140, 1148 (Fla. Dist. Ct. App. 1981), "a jury may infer the product in question is defective at both the time of the injury and at the time of sale if it (1) malfunctions (2) during normal operation." (App., *infra*, 16a n.9.)

The court of appeals noted, however, that a "*Cassisi* inference" goes only to the issue of whether the product is defective—not whether the defect was the proximate cause of the plaintiff's injuries. (App., *infra*, 16a n.9.) The court held that *Cassisi* did not save the Plaintiffs' case because "differential diagnoses alone would still be legally insufficient to meet their burden on causation." (App., *infra*, 16a-17a.)

The Defendants had argued that without other proof of the level of isomalathion to which the Plaintiffs were exposed (i.e., without Dr. Matson's testimony), the medical experts could not reliably establish causation through differential diagnosis alone. (Answer Brief at 50-51.)

Relying on its precedent in *Rider*, the court of appeals agreed:

> While numerous federal courts have found differential diagnosis sufficiently reliable to be admissible under *Daubert, see, e.g., Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 262-63 (4th Cir.1999), we have found in the context of summary judgment that differential diagnosis evidence by itself does not suffice for proof of causation. *See Rider*, 295 F.3d at 1199 (finding case reports containing differential diagnoses insufficient to prove causation without further evidentiary support).

(App., *infra*, 16a-17a.) Thus, the court of appeals adopted a bright-line rule of law from *Rider* that an expert may not testify as to causation when his opinions are based entirely on differential diagnosis.

Because the court of appeals concluded that the medical experts had no additional basis to support their opinions of causation, it affirmed summary judgment in favor of the Defendants. (App., *infra*, 17a.)

REASONS FOR GRANTING THE PETITION

I. The Circuits Are Split 5-3 Over Whether A Differential Diagnosis Opinion Is Reliable Without Additional Scientific Support.

This case presents a 5-3 split in the circuits between those that hold differential diagnosis evidence can be independently reliable proof of causation and those that hold that such evidence requires additional evidence to be admissible. The Third, Fourth, Sixth, Eighth, and Ninth

Circuits hold that differential diagnosis may be reliable and admissible independent of any other, supporting scientific evidence: *Kannankeril v. Terminix Int'l, Inc.*, 128 F.3d 802, 809 (CA3 1997) (reversing district court and holding differential diagnosis opinion that chemical caused plaintiff's illness was admissible without other evidence of dosage level); *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 262-63 (CA4 1999) (holding that differential diagnosis may be independently reliable without epidemiological studies, peer-reviewed studies, or laboratory data of dosage amount); *Hardyman v. Norfolk & W. Ry. Co.*, 243 F.3d 255, 261-266 (CA6 2001) (reversing district court and holding that differential diagnosis evidence may be reliable without supporting studies or evidence regarding a "dose/response relationship or threshold level"); *Bonner v. ISP Technologies, Inc.*, 259 F.3d 924, 929-31 (CA8 2001) (holding that an expert providing differential diagnosis in a toxic tort action does not need to support causation opinion with additional scientific evidence nor is it necessary that expert "quantify the amount" of substance to which plaintiff was exposed to demonstrate plaintiff was exposed to a toxic level); *Kennedy v. Collagen Corp.*, 161 F.3d 1126, 1228-30 (CA9 1998), *cert. denied*, 526 U.S. 1099 (1999) (holding that district court abused its discretion by excluding expert's differential diagnosis testimony that was based on reliable methodology simply because "no epidemiological or animal studies" linked defendant's product to plaintiff's disease).

These courts generally recognize that the technique "has widespread acceptance in the medical community, has been subject to peer review, and does not frequently lead to incorrect results." *Brown v. Southeastern Penn. Transp.*

Auth. (*In re Paoli R.R. Yard PCB Litig.*), 35 F.3d 717, 758 (CA3 1994). As one court explained:

> In the actual practice of medicine, physicians do not wait for conclusive, or even published and peer-reviewed, studies to make diagnoses to a reasonable degree of medical certainty. Such studies of course help them to make various diagnoses or to rule out prior diagnoses that the studies call into question. However, experience with hundreds of patients, discussions with peers, attendance at conferences and seminars, detailed review of a patient's family, personal, and medical histories, and thorough physical examinations are the tools of the trade, and should suffice for the making of a differential diagnosis even in those cases in which peer-reviewed studies do not exist to confirm the diagnosis of the physician.

Heller, 167 F.3d at 155.

Three other circuits, including the Eleventh, disagree. By clearly holding below that differential diagnosis is not sufficiently reliable by itself to support an opinion of causation, the Eleventh Circuit has joined the Fifth and Tenth Circuits in the minority 'differential diagnosis-*plus*' standard view. *See Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 276-79 (CA5 1998) (en banc) (holding that differential diagnosis opinion was properly excluded where not supported by hard science establishing level of dosage exposure), *cert. denied*, 526 U.S. 1064 (1999); *Black v. Food Lion*, 171 F.3d 308, 312 (CA5 1999) (finding an abuse of discretion to admit differential diagnosis evidence without substantial hard scientific evidence); *Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 885-86 (CA10 2005) ("reliance on differential diagnosis without supporting

epidemiological evidence is misplaced and demonstrates the unreliable nature of the testimony").

These circuits generally hold that "at least in toxic tort cases, a differential diagnosis, no matter how well done, can rarely prove general causation by itself." *The Admissibility of Differential Diagnosis Testimony to Prove Causation in Toxic Tort Cases: The Interplay of Adjective and Substantive Law*, 64 LAW & CONTEMP. PROBS. 107, 122 (Aug. 2001). They require additional, "hard science" to support such evidence: epidemiological studies, peer-reviewed published studies, and laboratory data of dosage amount. *Id.* at 122-23.

II. The Conflict Is Important.

It is time for this Court to resolve the conflict. As one court of appeals recently noted, "A whole sub-body of *Daubert* law has developed with respect to the reliability, and admissibility, of differential diagnosis." *Clausen v. M/V NEW CARISSA*, 339 F.3d 1049, 1057 (CA9 2003). Indeed, commentators have documented the growing split for the last several years, calling for Supreme Court review to provide a uniform rule of law.[1] The uncertainty

[1] *See, e.g.*, Edward J. Imwinkelried, *The Admissibility and Legal Sufficiency of Testimony About Differential Diagnosis (Etiology): Of Under- and Over-Estimations*, 56 BAYLOR L. REV. 391, 395-96 (2004) ("A sharp split of authority has developed over the admissibility and legal sufficiency of differential etiology testimony on the issues of general and specific causation.") (footnotes omitted); *Differential Diagnosis and Proof of Toxic Injury*, 3/31/2003 N.Y.L.J. 3, (col. 1) ("In light of the split in the case law, it is difficult to predict how a court will treat causation testimony based on differential diagnosis."); William C. Smith, *No Escape from Science*, 86 A.B.A. J. 60, 66 (Aug. 2000) ("The federal circuits are split on the admissibility of differential diagnosis."); Jack E.

(Continued on following page)

caused by the split calls out for resolution—especially given the stakes at issue in the cases most commonly impacted by the split.

Toxic tort cases tend to turn on differential diagnosis evidence. Because those cases tend to affect thousands of people—and the products involved often have a substantial impact on commerce in the United States (involving everything from organophosphates and PCBs to Vioxx and Bextra)—the conflict in the circuits is particularly important, and worthy of Supreme Court review.

Moreover, because toxic tort actions are often brought as class actions that may span more than one jurisdiction, the circuit split creates a clear incentive for forum shopping. For example, the prospects of surviving summary judgment on causation are very different when one crosses

---

Karnes, *Establishing the Standard for a Physician's Patient Diagnosis Using Scientific Evidence: Dealing with the Split of Authority Amongst the Circuit Courts of Appeal,* 15 B.Y.U. J. PUB. L. 1 (2000) ("The federal courts have not been a model of clarity with regard to this issue, and there now exists a singular split among the federal circuits that may have to be resolved by the Supreme Court."); John R. Henderson et al., *How "Reliable" Should a Physician's Diagnosis Be? Circuits Disagree Over Whether a Doctor's Causation Testimony Must Satisfy the Daubert Test,* NAT'L L.J., May 29, 2000, at B18-19; *How 'Reliable' Should A Physician's Diagnosis Be?, Circuits Disagree Over Whether A Doctor's Causation Testimony Must Satisfy The 'Daubert' Test,* 5/29/00 NAT'L L.J. B18, (col. 1) ("WITH CONTRARY RESULTS, federal courts have struggled with how the expanding sweep and dictates of *Daubert* and its progeny apply to a physician's differential diagnosis. . . . The 5th Circuit now requires that a physician's diagnosis be supported by hard science, such as scientific studies that are often beyond the standard practice of clinicians. The 3d Circuit, joined by the 4th Circuit, holds that a qualified physician's differential diagnosis is generally admissible under *Daubert*, even if it is not supported by scientific studies.").

the Georgia line out of the Eleventh Circuit into South Carolina in the Fourth Circuit.

III. The Court Of Appeals' Affirmance Depends On The Resolution Of The Questions Presented.

Finally, the Plaintiffs acknowledge that the court of appeals' opinion superficially appears to address the differential diagnosis issue in the alternative, because the court states that Plaintiffs' arguments in this regard are "insufficient to prevent summary judgment on two grounds." (App., *infra*, 15a.) The first "ground" identified by the court of appeals is that the Plaintiffs did not have "evidence that the Fyfanon was defective or negligently handled in the first place." (App., *infra*, 15a.) It concluded that because "there was no reliable expert evidence that the Fyfanon used over Tampa was defective without Matson's testimony, the testimony of the treating physicians is irrelevant and therefore was properly excluded." (App., *infra*, 16a.)

This might seem to be a basis for the court of appeals' ruling independent from the questions presented in this petition. But on closer review of the opinion, defect and causation are part of the same issue if differential diagnosis is independently adequate. In its analysis of the "second" ground, the court of appeals expressly acknowledges that Florida law provides that a jury may infer a product is defective if it "(1) malfunctions (2) during normal operation." (App., *infra*, 16a n.9.) In other words, when a product would not cause an injury when properly manufactured and distributed, proof that it caused an injury creates an inference that it was defective under Florida

products liability law.[2] *Cassisi v. Maytag Co.*, 396 So. 2d 1140, 1148 (Fla. Dist. Ct. App. 1981); *see also ISK Biotech Corp. v. Douberly*, 640 So. 2d 85, 88-89 (Fla. Dist. Ct. App. 1994) (applying *Cassisi* to toxic tort case involving pesticide). The court of appeals refers to this as a "*Cassisi* inference." (App., *infra*, 16a n.9.)

The court of appeals thus never rejects the Plaintiffs' argument that they are entitled to this inference based on their differential diagnosis evidence, and instead "assumes *arguendo* that evidence of a defect or negligence could have been sufficiently proved." (App., *infra*, 16a.) After noting that the *Cassisi* inference only obviates the need to prove a defect, the court explains that "a plaintiff still bears the burden to show that the defect caused his injuries." (App., *infra*, 16a n.9.) The court then concludes that differential diagnosis alone cannot support an expert opinion of causation. (App., *infra*, 16a-17a.)

If the Plaintiffs are correct that an expert opinion based on differential diagnosis may be sufficiently reliable, then the testimony of their medical experts would not only defeat summary judgment on the issue of causation, but also the issue of defect pursuant to *Cassisi*. Stated differently, the Plaintiffs' evidence of causation is sufficient to create an inference that the Fyfanon in this case was defective pursuant to *Cassisi* because properly manufactured and stored Fyfanon would not have injured the Plaintiffs.

---

[2] The record demonstrated that, in its non-defective state, Fyfanon is quite safe. (*See, e.g.*, Defendants' Eleventh Circuit Answer Brief at 5-6 (discussing 225 studies and reports, and the "widespread and safe use of the product for decades")). And there is no dispute that using the product as an aerial spray to eradicate medflies is normal operation.

In the words of the court of appeals, if the Plaintiffs are correct that differential diagnosis testimony can be admissible to prove causation, then the Plaintiffs presented "reliable expert evidence that the Fyfanon used over Tampa was defective without Matson's testimony," contrary to the court of appeals' first "ground" for affirming summary judgment. Thus, resolution of the question presented is dispositive to the correctness of the court of appeals' decision.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

JOHN G. CRABTREE
Counsel of Record
THE FLORIDA APPELLATE ALLIANCE, P.L.C.
328 Crandon Boulevard
Suite 225
Key Biscayne, Florida 33149
Telephone (305) 361-3770

JOHN S. MILLS
TRACY S. CARLIN
THE FLORIDA APPELLATE ALLIANCE, P.L.C.
865 May Street
Jacksonville, Florida 32204
Telephone (904) 350-0075

SHANNON MCLIN CARLYLE
THE FLORIDA APPELLATE ALLIANCE, P.L.C.
La Plaza Grande
Professional Center
20 La Grande Boulevard
The Villages, Florida 32159
Telephone (352) 259-8852

GLADSTONE N. JONES, III
SPIRO J. VERRAS
KEVIN E. HUDDELL
JONES, VERRAS & FREIBERG, L.L.C.
601 Poydras Street, Suite 2655
New Orleans, Louisiana 70130
Telephone (504) 523-2500

Counsel for Petitioners

June 24, 2005

[PUBLISH]

IN THE UNITED STATES COURT OF APPEALS
FOR THE ELEVENTH CIRCUIT

No. 04-10160

D. C. Docket No. 99-01097-CV-T-26TBM-8

KATHRYN RINK, et al.,

Plaintiffs,

BARBARA MCFARLAND, individually and on behalf of all persons similarly situated in the State of Florida, GINO GAVONI, SR., LISA GAVONI, both individually and as parents, natural guardians and next of friend of Victoria Gavoni and Gino Gavoni, Jr., both minors, and on behalf of all persons similarly situated in the State of Florida, MICHAEL ANOLFO, individually and as parent, natural guardian and next friend of Courtney Anolfo, a minor, and on behalf of all persons similarly situated in the State of Florida, ANGELINA DES AUSTELLES, individually and on behalf of all persons similarly situated in the State of Florida, MARK KNIERIM, individually and on behalf of all persons similarly situated in the State of Florida,

Plaintiffs-Appellants,

versus

CHEMINOVA, INC.,
CHEMINOVA A/S,
Successor to Cheminova Argo A/S,
AURIGA INDUSTRIES A/S,
Successor to Cheminova Holding A/S,

Defendants-Appellees.

Appeal from the United States District Court
for the Middle District of Florida

(Filed February 24, 2005)

Before BIRCH, BARKETT and COX, Circuit Judges.

BIRCH, Circuit Judge:

This appeal arises from the products liability and toxic trespass claims of nine individuals who allege they were exposed to a virulent substance used as a pesticide in Florida. The district court granted summary judgment to the manufacturer of the substance and its related entities following the court's exclusion of expert testimony under the principles of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S. Ct. 2786 (1993). Because the district court properly executed its gatekeeping function under *Daubert,* we find no abuse of discretion in the district court's exclusion of expert testimony. Further, because the requisite proof of causation was lacking without the expert testimony, we **AFFIRM** the district court's grant of summary judgment.

I. BACKGROUND

In May 1997, a Mediterranean fruit fly ("medfly") was discovered in Florida. To protect the state's agricultural industry from the harmful effects of a medfly infestation, the Florida Department of Agriculture and Consumer Services ("FDACS") and the United States Department of Agriculture ("USDA") decided to engage in aerial and ground spraying of a mixture of protein bait and malathion, a pesticide, to eradicate the medflies. Consequently, FDACS and USDA purchased malathion under the trade name Fyfanon from its manufacturer Cheminova A/S.[1] The Fyfanon was shipped from Cheminova's plant in Denmark to the United States where it was deposited into storage facilities in Texas, Georgia, and Florida. The Fyfanon was then transported by Cheminova, Inc. from these storage sites to Tampa, Florida where FDACS and USDA officials mixed the malathion with the protein bait and promptly sprayed the mixture over the Tampa metropolitan area and the surrounding counties. Shortly thereafter, certain individuals reported becoming seriously ill and subsequently brought this suit on behalf of themselves and others similarly situated in the State of Florida alleging, *inter alia,* products liability, negligence, and toxic trespass claims as a result of their exposure to the Fyfanon in the medfly spray.

---

[1] Cheminova A/S, Cheminova, Inc., and Auriga Industries A/S are the three Defendants-appellees (collectively "Cheminova") in this appeal. Cheminova A/S is a Danish company that manufactures pesticides. Cheminova, Inc. is a New Jersey corporation which is wholly-owned by Cheminova A/S and is responsible for sales and distribution of Cheminova A/S products in the United States. Cheminova A/S, in turn, is wholly-owned by Auriga Industries A/S, a Danish company.

The theories of liability asserted by the putative class representatives[2] hinged on their allegations that the Fyfanon ultimately sprayed over Tampa was defective and caused their injuries. The specific defect they alleged was that the Fyfanon contained elevated levels of isomalathion due to improper storage. Isomalathion is a malathion derivative which renders malathion particularly toxic to humans. The putative class representatives maintained that, prior to its delivery to FDACS and USDA, Cheminova A/S and Cheminova, Inc. allowed the Fyfanon to be exposed to temperatures exceeding those recommended for safe storage,[3] which precipitated a chemical decomposition of the malathion that produced increased levels of isomalathion.

To prove these claims, the putative class representatives retained Dr. Jack Matson as an expert to reconstruct the temperatures to which the Fyfanon was exposed and to render an opinion as to the isomalathion content in the Fyfanon ultimately used by FDACS and USDA over Tampa. Although Matson held a Ph.D. in chemical engineering and had previously worked with pesticides, he had no experience with malathion prior to being retained as an expert in this case. Matson issued reports on his findings in October 2000, May 2001, and July 2002, and he opined

---

[2] In a July 2001 order, the district court refused to certify a class action pursuant to Fed.R.Civ.P. 23(c)(4)(A) on the issue of whether Cheminova delivered defective Fyfanon to FDACS and USDA. The propriety of that order is before us in this appeal in addition to the district court's exclusion of expert witnesses and its grant of summary judgment.

[3] The United States Environmental Protection Agency label on Fyfanon containers indicates that Fyfanon should not be stored at temperatures exceeding 77 degrees Fahrenheit.

a final conclusion in his January 2003 deposition. In the October 2000 report, he concluded that the Fyfanon was stored at temperatures exceeding 77 degrees Fahrenheit. He calculated these temperature figures by starting with national weather service temperature readings of the areas near the storage sites. He used the recorded high and low temperatures as the upper and lower limits of the probable temperature to which the Fyfanon was exposed. Then, on the basis of some evidence that the temperature inside the Texas storage facility was actually eighteen degrees higher than the ambient air temperature recorded by the weather service,[4] he added eighteen degrees to the upper limits of plausibility for each site.[5] Then, Matson averaged the upper and lower limits to arrive at the most probable temperature to which the Fyfanon was exposed. This figure was then input into an equation which calibrated the level of isomalathion as a function of time and temperature exposure. Matson utilized the same methodology to derive temperature data in his May 2001 report. In his July 2002 report, Matson also claimed that eighteen degrees should be added to the upper limit of plausibility, although his explanation for the increase in this report

[4] Matson derived the eighteen degree differential based on information he received that some of the barrels in which the Fyfanon was being stored at the Texas site were melting. Matson researched the temperature at which the plastic in the barrels melted, subtracted the ambient temperature reported by the weather service reports, and found the difference to be eighteen degrees.

[5] Matson did not visit each storage site or account for differences in the way Fyfanon was stored at each site. Accordingly, his decision to increase the upper limit for all the sites was based on his conjecture that the storage methods and atmospheric conditions at each site were similar. Evidence in the record demonstrated, however, that temperature, length of storage, and storage conditions varied at each storage site.

was based on his theory of temperature increases due to the radiant energy of the sun. Finally, in his January 2003 deposition, Matson again concluded that the Fyfanon was exposed to temperatures exceeding the recommended 77 degrees Fahrenheit, although he based his conclusions on the autocatalytic effect that dimethyl sulfide produces in malathion when it is stored for a certain period of time.

Following Matson's deposition, Cheminova filed a motion to exclude expert testimony and a *Daubert* hearing ensued. At the conclusion of the five-day hearing, the district court excluded Matson because "the methodology by which he arrived at his ultimate conclusion is fundamentally flawed because it is not based on . . . sufficiently reliable data or facts." R3-570 at 8. The district court found that "there is simply too great an analytical gap between the data relied on by Dr. Matson and his proffered opinions." R3-570 at 8. In making this conclusion, the district court criticized Matson's method of extrapolating temperature data from one site to another without making particularized findings which accounted for the differences in conditions and length of storage at each site. In addition, the district court faulted Matson for: (1) his lack of prior experience with malathion, (2) his failure to visit the Fyfanon storage sites, (3) his failure to consider the testimony of workers at the various storage facilities, and (4) his continued use of certain data in later reports that had been deemed unreliable. In discussing this fourth flaw in Matson's methodology, the district court noted that the unreliability of his earlier data undermined his later calculations which used different methods but arrived at similar results. After making these observations, the district court added that there was no testimony that Matson's method was tested, subjected to peer review, or

generally accepted in the scientific community. Based on all of these findings, the district court granted Cheminova's motion to exclude Matson. In addition, the district court concluded that it necessarily followed that all the toxicology experts and treating physicians should be excluded as well because the relevance of their testimony depended on Matson's findings.

Without the testimony of Matson or any other toxicology expert, the district court found that proof of causation was lacking. Particularly, the district court noted that the putative class representatives could not identify: (1) the isomalathion levels in the Fyfanon when it was ultimately delivered to FDACS and USDA, and (2) the level of isomalathion at which the Fyfanon becomes defective, i.e. toxic to humans. Because evidence of causation was lacking, the district court granted summary judgment in favor of Cheminova. In making this ruling, the district court also denied the class representatives' request for a continuance to remedy the lack of causation evidence which resulted from the court's exclusion of Matson.

The putative class representatives make four arguments on appeal. First, they argue that the district court erred by excluding Matson and their other experts. Second, they contend that, even without the testimony of these experts, summary judgment was improperly granted because they did submit sufficient evidence of causation. Third, they argue that the district court erred by refusing to grant a continuance following the exclusion of their experts. Fourth, they argue that the district court improperly construed the requirements of Fed.R.Civ.P. 23(c)(4)(A) and therefore erred by refusing to grant class certification. We will address each argument in turn.

II. DISCUSSION

A. Exclusion of Expert Testimony

We review a district court's decision to exclude an expert's testimony under an abuse of discretion standard. *See Kumho Tire Co. v. Carmichael,* 526 U.S. 137, 152, 119 S. Ct. 1167, 1176 (1999). This standard of review requires that we defer to the district court's ruling unless it is "'manifestly erroneous.'" *Quiet Tech. DC-8, Inc. v. Hurel-Dubois UK Ltd.,* 326 F.3d 1333, 1340 (11th Cir. 2003) (quoting *General Elec. Co. v. Joiner,* 522 U.S. 136, 142, 118 S. Ct. 512, 517 (1997)). Because the task of evaluating the reliability of expert testimony is uniquely entrusted to the district court under *Daubert, see McCorvey v. Baxter Healthcare Corp.,* 298 F.3d 1253, 1256 (11th Cir. 2002), we give the district court "considerable leeway" in the execution of its duty. *Kumho Tire Co.,* 526 U.S. at 152, 119 S. Ct. at 1176.

The admission of expert evidence is governed by Federal Rule of Evidence 702,[6] as explained by *Daubert* and its progeny. Under Rule 702 and *Daubert,* district courts must act as "gatekeepers" which admit expert testimony only if it is both reliable and relevant. *See*

---

[6] Rule 702 provides:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702.

Daubert, 509 U.S. at 589, 113 S. Ct. at 2795. District courts are charged with this gatekeeping function "to ensure that speculative, unreliable expert testimony does not reach the jury" under the mantle of reliability that accompanies the appellation "expert testimony." *McCorvey,* 298 F.3d at 1256. To fulfil their obligation under *Daubert,* district courts must engage in a rigorous inquiry to determine whether: "(1) the expert is qualified to testify competently regarding the matters he intends to address; (2) the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in *Daubert*; and (3) the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue." *City of Tuscaloosa v. Harcros Chems., Inc.,* 158 F.3d 548, 562 (11th Cir. 1998) (footnote omitted). The party offering the expert has the burden of satisfying each of these three elements by a preponderance of the evidence. *See Allison v. McGhan Med. Corp.,* 184 F.3d 1300, 1306 (11th Cir. 1999).

In ascertaining reliability under the second *Daubert* prong, we have identified several factors which can be considered: (1) whether the expert's methodology can be tested; (2) whether the expert's scientific technique has been subjected to peer review and publication; (3) whether the method has a known rate of error; (4) whether the technique is generally accepted by the scientific community. *Quiet Tech. DC-8, Inc.,* 326 F.3d at 1341. This list of factors, however, "do[es] not exhaust the universe of considerations that may bear on . . . reliability." *Id.; see also Kumho Tire Co.,* 526 U.S. at 150, 119 S. Ct. at 1175 ("*Daubert* makes clear that the factors it mentions do *not* constitute a 'definitive checklist or test.'") (citation omitted); *Daubert,* 509 U.S. at

594, 113 S. Ct. at 2797 (noting that the Rule 702 inquiry is "a flexible one"). District courts "have substantial discretion in deciding how to test an expert's reliability. . . ." *United States v. Majors,* 196 F.3d 1206, 1215 (11th Cir. 1999) (internal citation omitted).

The putative class representatives argue that Matson's exclusion was improper for two reasons. First, they argue that the district court improperly based its determination on Matson's general personal credibility, thereby assuming the role of the trier of fact. A thorough review of the record reveals that this objection is unfounded; the district court's exclusion of Matson was grounded in its criticism of his method, not his credibility. For example, the district court faulted Matson for his facile transposition of temperature data from one site to another. Under Matson's method, temperature data from the Texas storage site could be applied to the Georgia and Florida sites because storage conditions were supposedly similar and the sites were all in the same basic latitudinal range. Transposition of data based on such conjecture and rough approximation lacks the "intellectual rigor" required by *Daubert. Kumho Tire Co.,* 526 U.S. at 152, 119 S. Ct. at 1176. Additionally, the district court critiqued Matson's conclusion that eighteen degrees should be added to the upper limit of the plausible temperature to which the Fyfanon was exposed. Whether it was based on evidence that some of the barrels at the Texas site were melting or evidence of radiant energy from the sun or an autocatalytic effect, the district court found, and we agree, that Matson's addition of eighteen degrees required the kind of scientifically unsupported "leap of faith" which is condemned by *Daubert. See Rider v. Sandoz Pharms. Corp.,* 295 F.3d 1194, 1202 (11th Cir. 2002). Apart from these

particularized criticisms, the district court found Matson's methods of data transposition and temperature extrapolation failed under the reliability factors we mentioned in *Quiet Technology* because the methods were not tested, subjected to peer review, or generally accepted in the scientific community. Finally, the district court criticized Matson's method of continuing to use data in subsequent reports which was previously found to be unreliable. The record thus reflects that the district court properly rejected Matson on the basis of his flawed methodology. While the putative class representatives argue that an isolated remark by the district court – that Matson's final conclusions were undermined by his previously flawed reports – represents an impermissible credibility determination, we find that, because the district court's evaluation was properly cabined to a critique of Matson's method, that argument is misplaced.[7] Accordingly, we reject the

[7] We note that the argument made by the putative class representatives misconstrues the difference between a district court's evaluation of an expert's reliability, which is required by *Daubert*, and an expert's believability or persuasiveness, which is reserved for the trier of fact, *see Quiet Tech. DC-8, Inc.*, 326 F.3d at 1341. As we explained in *Quiet Technology*, a district court's exercise of its gatekeeper function under *Daubert* "is not intended to supplant the adversary system or the role of the jury." *See id.* (citation omitted). Accordingly, a district court may not exclude an expert because it believes one expert is more persuasive than another expert. Additionally, a district court cannot exclude an expert because it believes the expert lacks personal credibility because of prior bad acts or other prior instances of untruthfulness. Vigorous cross-examination ensures that these issues of general credibility are properly presented for consideration by the trier of fact. *See Daubert*, 509 U.S. at 596, 113 S. Ct. at 2798. In evaluating the reliability of an expert's method, however, a district court may properly consider whether the expert's methodology has been contrived to reach a particular result. *See Joiner*, 522 U.S. at 146, 118 S. Ct. at 519 (affirming exclusion of testimony where the methodology was called into question because an "analytical gap" existed "between the data and the

(Continued on following page)

argument that the district court's exclusion of Matson was based on his general personal credibility. Additionally, we reject the argument that the district court's analysis somehow invaded the province of the jury by evaluating Matson's method based on factors not explicitly enumerated in *Quiet Technology* because a district court has "substantial discretion" in how it chooses to evaluate an expert's reliability, *see Majors*, 196 F.3d at 1215, and the factors listed in *Quiet Technology* are not the only factors that may be considered, *see Quiet Tech. DC-8, Inc.*, 326 F.3d at 1341.

The putative class representatives' second argument – that the district court improperly took issue with Matson's data, and not his methodology – is equally without merit. While they suggest that the only methodology at issue was Matson's use of an equation to determine isomalathion levels, this argument belies the fact that Matson employed two methodologies: first, he employed certain methods of extrapolation and transposition to arrive at temperature data; and second, he inserted the temperature data into an equation to arrive at the level of isomalathion in the Fyfanon. As we have explained, the district court's exclusion of Matson was based on its rejection of his methodology to derive temperature data, not the data itself. Thus, the district court's exclusion of Matson can be distinguished from a situation in which an exclusion is based on a district court's refusal to credit hard data arrived at by

---

opinion proffered"); *see also Elcock v. Kmart Corp.*, 233 F.3d 734, 748 (3d Cir. 2000) (questioning the methodology of an expert because his "novel synthesis" of two accepted methodologies allowed the expert to "offer a subjective judgment . . . in the guise of a reliable expert opinion").

unassailable methods. *See id.* at 1345 (rejecting the argument that an expert should be excluded because "the specific numbers that [he] used were wrong"). Here, the data Matson produced was driven by the methodology he used, and thus the district court's inquiry into how he arrived at the data is not inappropriate considering that the district court is charged with evaluating an expert's methodology. *See* Fed. R. Evid. 702 (requiring expert testimony to be the "product of reliable principles and methods"); *see also id.* (requiring that an expert's testimony is based on "sufficient . . . data."); *Joiner,* 522 U.S. at 146, 118 S. Ct. at 519 (noting that a district court's consideration of data is proper in the context of evaluating methodology when an "analytical gap [exists] between the data and the opinion proffered").

Based on the foregoing, we find the district court did not abuse its discretion by excluding Matson. Because the district court's evaluation of Matson's methodology stayed within the limits prescribed by *Daubert* and its progeny, its exclusion of Matson was not "manifestly erroneous." *Quiet Tech. DC-8, Inc.,* 326 F.3d at 1340. Additionally, we find that the district court properly excluded the toxicology experts and the physicians who treated the putative class representatives. The district court found that the excluded experts relied on Matson's findings, which we have found to be unreliable. Moreover, without Matson's foundational testimony that the Fyfanon used in the medfly spray was defective because it contained elevated levels of isomalathion, the testimony of the toxicologists – regarding the usual symptoms of isomalathion exposure – and the testimony of the treating physicians – regarding the congruence between these symptoms and the ailments allegedly suffered by the class representatives – is irrelevant. Accordingly, the

district court's exclusion of the toxicology experts and the treating physicians was not an abuse of discretion. *See Daubert,* 509 U.S. at 589, 113 S. Ct. at 2795 (requiring expert testimony to be "relevant" to be admissible); *Allison,* 184 F.3d at 1320 (affirming exclusion of expert witness on relevance grounds because two other experts which were crucial to the expert's relevance were excluded).

B. Grant of Summary Judgment

"We review *de novo* a district court's grant of summary judgment, applying the same legal standards as the district court." *McCorvey,* 298 F.3d at 1257. The grant of summary judgment is appropriate only where "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c); *see Celotex Corp. v. Catrett,* 477 U.S. 317, 323, 106 S. Ct. 2548, 2552 (1986). In conducting this inquiry, we construe the facts and draw all reasonable inferences in the light most favorable to the nonmoving party. *See McCorvey,* 298 F.3d at 1257. Summary judgment must be granted if the nonmoving party has "failed to make a sufficient showing on an essential element of her case with respect to which she has the burden of proof." *Celotex Corp.,* 477 U.S. at 323, 106 S. Ct. at 2552.

The district court granted summary judgment as to the negligence claims and the strict products liability claims because there was no evidence that the Fyfanon used in the medfly spray caused the putative class representatives' injuries. The class representatives argue that

summary judgment was improperly granted because, even without the testimony of Matson and the toxicologists, they could still meet their burden on the causation element through the testimony of the treating physicians who, through differential diagnoses,[8] could testify that the most likely cause of the class representatives' injuries was exposure to Fyfanon.

This argument is insufficient to prevent summary judgment on two grounds. First, as we have explained, without Matson's evidence that the Fyfanon was defective or negligently stored because it contained elevated levels of isomalathion, the testimony of the treating physicians is irrelevant. To establish causation sufficient for a negligence claim in a products liability case, the plaintiff must prove by a preponderance of the evidence that his injury was proximately caused by the manufacturer's breach of its duty to produce a product reasonably safe for use. *See Indem. Ins. Co. of N. Am. v. Am. Aviation Inc.*, 344 F.3d 1136, 1146 (11th Cir. 2003) (per curiam) (applying Florida law). To prove causation under a strict products liability theory, a plaintiff must prove that the product defect proximately caused his injury. *See McCorvey*, 298 F.3d at 1257 (citing *Edward M. Chadbourne, Inc. v. Vaughn*, 491 So. 2d 551, 553 (Fla. 1986)). Thus, under either theory of liability, necessarily antecedent to testimony from the treating physicians that defective Fyfanon caused the class representatives' injuries is evidence that the Fyfanon was defective or negligently handled in the first place. *See Oken v. Monsanto Co.*, 371 F.3d 1312, 1314 (11th Cir. 2004)

[8] Differential diagnosis is a process by which a physician systematically eliminates possible causes of a patient's ailment to arrive at its most probable cause.

(per curiam) (noting that proving causation for negligence and strict liability claims requires proof of a breach or a defect and then proof that the specific breach or defect "alleged" caused the injury); *Higginbotham v. Mobil Oil Corp.*, 545 F.2d 422, 427 (5th Cir. 1977) (noting that a defect must be established before presenting evidence regarding causation), *rev'd on other grounds,* 436 U.S. 618, 98 S. Ct. 2010 (1978). Because the district court found, and we agree, that there was no reliable expert evidence that the Fyfanon used over Tampa was defective without Matson's testimony, the testimony of the treating physicians is irrelevant and therefore was properly excluded. *See Daubert,* 509 U.S. at 589, 113 S. Ct. at 2795; *Allison,* 184 F.3d at 1320 (affirming exclusion of expert on relevance grounds).

Second, assuming *arguendo* that evidence of a defect or negligence could have been sufficiently proved to restore the relevance of the treating physicians' testimony, or that the putative class representatives were entitled to a presumption that the Fyfanon was defective under the principles of *Cassisi v. Maytag Co.*, 396 So. 2d 1140, 1148 (Fla. Dist. Ct. App. 1981),[9] differential diagnoses alone would still be legally insufficient to meet their burden on causation. While numerous federal courts have found differential diagnosis sufficiently reliable to be admissible

[9] Under Florida products liability law, a jury may infer the product in question is defective at both the time of the injury and at the time of sale if it (1) malfunctions (2) during normal operation. *See Cassisi,* 396 So. 2d at 1148. A *Cassisi* inference only obviates the need to prove a defect; a plaintiff still bears the burden to show that the defect caused his injuries. *See McCorvey,* 298 F.3d at 1257 (noting that proof of a defect and proof of causation are separate elements in products liability claim).

under *Daubert, see, e.g., Westberry v. Gislaved Gummi AB,* 178 F.3d 257, 262-63 (4th Cir. 1999), we have found in the context of summary judgment that differential diagnosis evidence by itself does not suffice for proof of causation. *See Rider,* 295 F.3d at 1199 (finding case reports containing differential diagnoses insufficient to prove causation without further evidentiary support).

Without the expert testimony of Matson, the toxicologists, and the treating physicians, proof that defective Fyfanon caused the injuries alleged by the putative class representatives was lacking. Accordingly, because the putative class representatives failed to make a sufficient showing for an element on which they had the burden of proof, the district court properly granted summary judgment in favor of Cheminova. *See Celotex Corp.,* 477 U.S. at 323, 106 S. Ct. at 2552.

C. Refusal to Grant Continuance

We review a district court's denial of a motion for a continuance under an abuse of discretion standard. *See Quiet Tech. DC-8, Inc.,* 326 F.3d at 1351. The denial of a request for a continuance does not constitute an abuse of discretion unless it "severely prejudice[s]" the moving party. *See Smith-Weik Mach. Corp. v. Murdock Mach. & Eng'g Co.,* 423 F.2d 842, 844 (5th Cir. 1970); *see also Hashwani v. Barbar,* 822 F.2d 1038, 1040 (11th Cir. 1987) (per curiam) ("The denial of a continuance is within the broad discretion of the district court and will not be overturned unless arbitrary or unreasonable."). In reviewing a denial of a continuance request, we consider: (1) the moving party's diligence in its efforts to ready its case prior to the date set for hearing; (2) the likelihood that the

need for a continuance would have been remedied had the continuance been granted; (3) the extent to which granting the continuance would have inconvenienced the court and the opposing party; (4) the extent to which the moving party might have suffered harm as a result of the district court's denial. *See Quiet Tech. DC-8, Inc.*, 326 F.3d at 1351 (quoting *Hashwani*, 822 F.2d at 1040).

Based on these factors, we find that the district court did not abuse its discretion by refusing to grant a continuance. We find that the first factor favors Cheminova because the class representatives' sole reliance on Matson to prove the isomalathion levels in the Fyfanon did not represent the kind of diligence in trial preparation that merits a continuance. *See Weisgram v. Marley Co.*, 528 U.S. 440, 456, 120 S. Ct. 1011, 1021 (2000) (faulting a litigant for not taking steps to supplement its evidence with another expert when the opposing party was challenging a crucial expert); *Lujan v. Nat'l Wildlife Fed'n*, 497 U.S. 871, 897, 110 S. Ct. 3177, 3193 (1990) ("[A] litigant's failure to buttress its position because of confidence in the strength of that position is always indulged in at the litigant's own risk."). The third factor also weighs in favor of Cheminova because granting a continuance to allow the class representatives to find another expert would have required the court, as well as Cheminova, to invest more time and effort to determine the new expert's reliability. Requiring the district court and Cheminova to conduct such an inquiry at this advanced stage of litigation after already conducting an intensive *Daubert* hearing would represent a substantial inconvenience. The fourth factor also militates in favor of Cheminova because the class representatives did not suffer any harm by the district court's failure to grant a continuance. *See Quiet Tech. DC-8, Inc.*, 326 F.3d at 1351

(finding no harm where the grant of a continuance would not have changed the disposition on the merits). Thus, although the grant of the continuance may have afforded the class representatives time to remedy the evidentiary hole in their case as to a product defect produced by the exclusion of Matson and other experts, the other *Quiet Technology* factors weigh in favor of Cheminova and demonstrate that the district court was within its discretion to deny the continuance. Moreover, we reject the class representatives' argument that it is an abuse of discretion *per se* if the district court's own order excluding an expert caused the need for the continuance. *See Quiet Tech. DC-8, Inc.*, 326 F.3d at 1350-51 (finding no abuse of discretion in district court's denial of continuance request where it was the district court's own declination to appoint an expert under Fed.R.Evid. 706 which factored into the need for the continuance); *Pena v. Leombruni*, 200 F.3d 1031, 1035 (7th Cir. 1999) (finding no abuse of discretion in district court's denial of continuance request to develop substitute expert testimony following its exclusion of an expert when litigant was on notice that the expert's admissibility would be challenged). Accordingly, on these facts, the district court was within its discretion to deny the putative class representatives' request for a continuance.

D. Refusal to Certify Class Action

Finally, the putative class representatives argue that the district court improperly denied their request for class certification under Fed. R. Civ. P. 23(c)(4)(A). Because we have found that summary judgment was properly granted as to the underlying claims of the class representatives, the issue of class certification is moot. *See Telfair v. First Union Mortgage Corp.*, 216 F.3d 1333, 1343 (11th Cir.

2000) ("With no meritorious claims, certification of those claims as a class action is moot."). Accordingly, we decline to address the putative class representatives' class certification argument.

III. CONCLUSION

We have previously noted that "[t]oxic tort cases . . . are won or lost on the strength of the scientific evidence presented to prove causation." *Rider,* 295 F.3d at 1197. This case about exposure to an allegedly defective pesticide is no exception. In an attempt to restore the testimony of their experts, the putative class representatives argued on appeal that the district court misapplied the principles of *Daubert* and therefore erred in its exclusion expert testimony. Because the district court properly executed its gatekeeper function under *Daubert,* its exclusion of expert testimony was not an abuse of discretion. Furthermore, because sufficient evidence of causation was lacking without the expert testimony, the grant of summary judgment was appropriate. Accordingly, the district court's exclusion of expert testimony and grant of summary judgment are AFFIRMED.

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
TAMPA DIVISION

KATHRYN RINK, individually and as parent, natural guardian and next friend of JASON RINK and ADAM RINK, both minors, and on behalf of all persons similarly situated in the State of Florida, et al.,

Plaintiffs,

-vs-

CHEMINOVA, INC., CHEMINOVA A/S and AURIGA INDUSTRIES A/S,

Defendants.

Case No. 8:99-cv-1097-T-26-TBM

JUDGMENT IN A CIVIL CASE

(Filed Dec. 13, 2003)

Decision by Court. This action came to trial or hearing before the Court. The issues have been tried or heard and a decision has been rendered

IT IS ORDERED AND ADJUDGED that judgment is entered in favor of the defendants as to all Plaintiffs and all claims nunc pro tunc to June 20, 2003.

Date: December 10, 2003

SHERYL L. LOESCH, CLERK

By: /s/Jeanne Hueting

Copies furnished to:

Counsel of Record
Unrepresented Parties

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
TAMPA DIVISION

BARBARA McFARLAND, et al.,

Plaintiffs,

v.

CHEMINOVA, INC., et al.,

Defendants. /

CASE NO: 8:990-cv-1097-T-26TBM

ORDER

(Filed June 5, 2003)

This cause was before the Court on the parties' respective motions in limine and motions for summary judgment. The Court undertook an extensive review of the parties' submissions in support of their motions and conducted an extensive evidentiary hearing as to the motions in limine. Following the evidentiary hearing, the court orally announced findings of fact and conclusions of law in support of its determinations that the Plaintiffs' motion in limine should be denied and that the Defendants' motion in limine should be granted in part and denied in part. The Court explicitly adopts those oral findings and conclusions as part of this order.

The Court then heard oral argument from the parties as to their motions for summary judgment but with the focus narrowed to the issue of the causation in light of the Court's ruling granting the Defendants' motion in limine and excluding as unreliable under the principles of *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 113 S. Ct.

2786, 509 U.S. 579, 125 L. Ed. 2d 469 (1993), and its progeny, the testimony of the Plaintiffs' causation experts. After hearing oral argument, and based on the record before the court, the Court made oral findings and conclusions that there was a complete absence of evidence by which the Plaintiffs could establish that the Defendants' malathion product contained in the "Medfly Spray" sprayed on the Plaintiffs caused their injuries. The Court also explicitly adopts those oral findings and conclusions as part of this order.

Accordingly, it is ordered and adjudged as follows:

1) The Defendants' Motion in Limine to Exclude Plaintiffs' Expert Witnesses (Dkt. 461) is granted in part and denied in part.

2) The Plaintiffs' Motion in Limine to Exclude Evidence (Dkt. 482) is denied.

3) The Plaintiff's Motion for Partial Summary Judgment on Liability and on Defendants' Affirmative Defenses (Dkt. 483) is denied on the merits as to liability and is denied as moot as to the affirmative defenses.

4) The Defendants' Amended Motion for Summary Judgment (Dkt. 500) is granted on the merits as to causation and, thus, as to liability and denied as moot as to all other issues raised.

5) The Clerk is directed to enter judgment in favor of the Defendants as to all Plaintiffs and to close this case.

6) The Court reserves jurisdiction to consider the issues of attorney fees and costs. Counsel is put on notice, however, that the Court is not inclined to make any award of attorney fees and costs until such time as the appeal in

this case (assuming one is taken by the Plaintiffs) has been resolved by the Eleventh Circuit Court of Appeals.

DONE AND ORDERED at Tampa, Florida, on June 6, 2003.

/s/ Richard A. Lazzara
RICHARD A. LAZZARA
UNITED STATES
DISTRICT JUDGE

COPIES FURNISHED TO:
Counsel of Record

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
TAMPA DIVISION

KATHRYN RINK, et al,
Plaintiff,

VS.

CHEMINOVA, INC., et al,
Defendant. /

CASE NO:
8:99-CV-1097-T-26TBM

Tampa, Florida
June 4, 2003
9:45 a.m.

TRANSCRIPT OF DAUBERT MOTION HEARING
BEFORE THE HONORABLE RICHARD A. LAZZARA
UNITED STATES DISTRICT JUDGE

APPEARANCES:

Counsel for Plaintiffs: SPIRO J. VERRAS, ESQUIRE
Jones, Verras & Freiberg, LLC
One Harbor Island Boulevard
Suite 175
Tampa, Florida 33602
813-228-6800

BRYAN MCMINN, ESQUIRE,
STEVEN MAHER, ESQUIRE
KEVIN HUDDELL, ESQUIRE.
Maher, Guiley & Maher, P.A.
631 W. Morse Boulevard,
Suite 200
Winter Park, Florida 32789
407-839-0866

For the Defendants: JOSEPH H. VARNER, III, ESQUIRE
Knopik, Krieger and Varner
406 S. Morgan Street
Tampa, Florida 33602
813-221-3131

CHRISTOPHER G. KELLY, ESQUIRE
Haight Gardner Holland & Knight
195 Broadway – 24th Floor
New York, New York 10007
212-513-2000

G. CALVIN HAYES, ESQUIRE
BRAD KIMBRO, ESQUIRE
Holland & Knight, LLP
400 N. Ashley Drive, Suite 2300
Tampa, Florida 33602-1288
813-227-8500

Court Reporter: CLAUDIA SPANGLER-FRY, RPR, CM
Official Court Reporter
801 North Florida Avenue
Room 1548
Tampa, Florida 33602
813-301-5575

[3] PROCEEDINGS

June 4, 2003

* * *

THE COURT: All right. I've done a lot of thinking and it seems to me that before I address the issues in the motions for Summary Judgment, that I come to some resolution of the Motions in Limine.

Obviously, I know everybody would like to have a written memorandum and opinion but, obviously, that's not feasible unless you want to come back in another two weeks, and given the impending trial date, I just feel it's appropriate. I think it's consistent with the rules that I make findings and conclusions on the record and later incorporate them into a simple order. That's the most

expedient thing that I can think to do in this case in terms of judicial efficiency.

So, I intend to announce my rulings on the Motions in Limine, and I'm going to address the Defendants' motion first, so bear with me.

Now, the starting point in my analysis begins, of course, with the plain words of Federal Rule of Evidence 702, which states that if scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill,

* * *

[39] would follow that approach. Well, it's like that at Ennis, it must be like that over here.

So, for all those reasons, the Motion in Limine with regard to Dr. Matson is granted. It may necessarily follow that the motion must likewise be granted as to the toxicology experts and the treating and examining physicians. Without Dr. Matson's foundational testimony, their testimony makes no sense in this case, doesn't fit.

Plus, I don't think they have a basis to render an opinion anymore. I think Dr. Abou-Donia told me, I relied on it. They all relied on it.

With regard to Berkman and Smith – Smith is a close call, but it seems to me that he has relevant testimony and it fits. I know he can't say that the tests were inaccurate, and I know that the FDACS lab is not seeking certification, but I think it's relevant and it's a matter for cross-examination.

With regard to Mr. – Dr. Berkman, I'm not going to exclude him. That's a matter for cross. I find he's well qualified. I don't know that it makes any difference now.

With regard to the Plaintiffs' Motion in Limine, I'm going to deny those, assuming that these come in as public records. I can't find as a matter of law that those test results are not reliable and trustworthy to the extend

* * *

[44] locations at which the Fyfanon was stored prior to delivery.

That ties into the final – I'm not giving an exhaustive list, those are the things that jump out at me at this time. That ties into the final issue, which is the fact that, based on this evidence and based on the immediate onset of illness in the Plaintiffs, a jury and – a jury can certainly infer that the storage to which the Malathion –

THE COURT: Res ipso loquitur.

MR. VERRAS: Yes.

THE COURT: That's what has driven this case from the very beginning, res ipso loquitur. It fell from the sky, people became sick, it thus must be toxic. That's what has driven this case. That was the fundamental starting point, and that's where Dr. Matson started from and he was going to arrive at that conclusion no matter what.

This is not a res ipso loquitur case to the extent that I would give that type of instruction to the jury. If you think that you're going to put on the Plaintiff to say, I was out there, it fell on me, put on a doctor to say, she showed these symptoms –

MR. VERRAS: I disagree, Your Honor. I think that that could be an arguable basis for a jury fining [sic] in this case. The fact is that the Defendants –

THE COURT: Your theory is that she was sprayed, each of these Plaintiffs was sprayed with a product [45] containing Fyfanon and Nu-lure bait that contained more than .2 percent Isomalathion. That's what you pled. That's what you have to prove.

MR. VERRAS: I don't believe that that's correct, Your Honor. There's a negligence count in our complaint that does not mention the Isomalathion levels except in the context of –

THE COURT: You incorporated in extenso – I like that phrase. In extenso you incorporated those facts into each count. I've read the complaint.

MR. VERRAS: My argument would be that the facts are incorporated as applicable and that a statutory exceedence is not necessary –

THE COURT: You are changing your whole theory of the case now.

MR. VERRAS: The theory of the case on the negligence front has always been that the Defendants breached their duty in terms of their negligent storage, their reckless storage practices in the southern United States, and that they knew or should have known that that storage would cause injury to people who were either sensitive or who were otherwise exposed to a hazardous amount.

The connection – in a negligence case you have to prove that there was a duty and that they breached it, and

[46] that that breach was the proximate cause of damages, and I think that the circumstantial evidence –

THE COURT: How did they breach it?

MR. VERRAS: They admitted that they did not store their product in accordance with the label requirements. They have admitted that their customers in Florida would have expected them to store –

THE COURT: What did that cause?

MR. VERRAS: It caused an increase in Isomalathion content.

THE COURT: To what level?

MR. VERRAS: In the case of negligence, a level is not necessary. Dose is not necessary for a doctor to render a differential diagnosis that exposure to organophosphates caused organophosphate related injury. When he excludes other causes, he can render that opinion. We can present their own testimony to the effect that storing this product at temperatures over the label requirements –

THE COURT: So, now you're saying at any level.

MR. VERRAS: Not at any level. As I presented to the Court yesterday, the Isomalathion – there is no magic level. People – more people get sick, sicknesses become more severe. A jury can look at that science, which is testified to by the Defendants, which in their patent application, which is all over the place.

* * *

[71] is. The jury is going to figure out what the level is.

THE COURT: No, no, but you're going to have to get – you know, we just don't put people in there and just dump evidence on them. You've got to have some kind of theory. What's your theory? What are you going to tell them in opening statement?

MR. VERRAS: We're going to tell them that Cheminova has known for many years that as Isomalathion levels increase, the toxicity of the product to humans increases.

THE COURT: And at what level does it become toxic? You can't tell me, Mr. Verras.

MR. VERRAS: There's no answer to that question. It could be –

THE COURT: Well, then that ends it. There's no answer to the question at what level does Isomalathion become toxic.

MR. VERRAS: Isomalathion is intrinsically very, very toxic. Dr. Abou-Donia would testify that if you drank a teaspoon of it you'd be dead. The Malathion itself is toxic to mammals. Isomalathion makes Malathion much more toxic and then adds its own toxicity.

There is no requirement that we come in and specify at what level Barbara McFarland suddenly would become ill. The fact is that Isomalathion – it's a logical

[72] inference, it's general causation, it's enough for a differential diagnosis to be based on.

Her own treating physician will testify that he believes that the Malathion caused her injury. Based – supplemented with Dr. Richards and Dr. Abou-Donia's

testimony that the Isomalathion makes injuries worse, the jury can cast liability upon the manufacturer.

Under their reasoning, the product could reach a level of Isomalathion sufficient that she could have dropped dead on the spot and they could not be held liable because she could never prove at what level she – it became fatal to her. There is no – an LD 50, for instance, which is what all the science is based on, is where half the rats die and half the rats live. The fact is half the rats live at the LD 50, but half the rats also die.

There's a memo –

THE COURT: What do you say to Mr. Varner's argument, you know, law sometimes lags behind science?

MR. VERRAS: But here, law would be lagging behind law. Every toxic tort case faces this situation. There's never a magic line. There's no magic line in any situation in terms of dose. That's – we have briefed it extensively in our opposition to their Motion in Limine. Dose is not a requirement.

The doctor does not have to say because she got X

* * *

[95] our interpretation –

THE COURT: How in the world can you tell me you're going to link it circumstantially?

MR. HUDDELL: The Defendants – that product, the exact product was not tested. In fact, if we go to one extreme, none of the actual product was tested by FDACS, but there is very good circumstantial evidence.

If you can show that the storage conditions at Ennis were similar – and I would fully expect if this case were going to trial from – with Dr. Matson's calculations, that they would use – and they would argue that they can – they do have good circumstantial evidence that her product was tested. It's a good inference of what she was exposed to.

It's not like saying, well, FDACS tested product from Gray or Micro Flo and that's indicative of what Barbara was exposed to. Ms. McFarland was exposed to product from Ennis. Product from Ennis, I concede, was tested. I would – I would – I would think that – or I would contend that that is good circumstantial evidence.

THE COURT: Okay. Is that it?

MR. HUDDELL: Once the jury hears that Ms. McFarland was exposed to that product, or has circumstantial evidence that she was exposed to that product under similar conditions, her treating physicians can, with [96] their understanding of her onset of exposure, temporal relationship with her symptoms, and that her symptoms were consist with organophosphate –

THE COURT: Consistent is not the benchmark. Did you read Turpin? Did you read the Turpin decision?

MR. HUDDELL: Your Honor, I have not.

THE COURT: Most did it – did it probably cause, not is it consistent, not could it have caused. Did it probably cause.

MR. HUDDELL: Your Honor, from a differential diagnosis standpoint, that is consistent, I believe, is

enough. It's consistent with it. Rule out other causes. Differential diagnosis is ruling out –

THE COURT: You still, when all is said and done, have to show that her conditions were probably caused by some unknown elevated levels of Isomalathion contained in the spray.

MR. HUDDELL: That's where the Casissi inference would come in as well. We have – the record is replete with testimony from Cheminova representatives that this product has never caused harm to anybody when applied correctly.

Now, if they want to bring in evidence that it wasn't applied correctly, that's fine. But, if this product doesn't cause harm unless there's something wrong with it, [97] then we get an inference of a defect here.

THE COURT: What is that defect?

MR. HUDDELL: The best we have been able to determine is elevated levels of Isomalathion.

THE COURT: What elevated levels?

MR. HUDDELL: Well, in Barbara McFarland's case, we have very good circumstantial evidence of above .2.

THE COURT: Back to the .2, then.

Rebuttal, Mr. Varner. What do you say to them trying to come in through the back door attacking the FDACS testing?

MR. VARNER: Well, two quick points. I guess they are completely abandoning everything they have filed

with this Court up to this point, because according to Jack Matson's report about Barbara McFarland's date of exposure, that product was, in fact, tested and found to be below .2.

So, I suppose now they are running away from every prior position they have filed in this case. The inference argument, to me, Judge, is simply absurd in the context of this case.

You know, Mr. Huddell loves to make these general statements that Cheminova representatives have said this product never hurts anybody when used correctly. I'd like record citations for everything these gentlemen say.

THE COURT: I've been bothered by – I pointed out [98] that one in their Motion in Limine with regard to Mr. Weiss, what he supposedly said, and I go to that exhibit and I said, he didn't even say that.

MR. VARNER: Judge, this is a matter for another day, but we have dealt with that from the outset of this case, from the outset, and we're dealing with it in this Courtroom today.

The inference argument is simply absurd. It is a pesticide. Government officials expected certain people to get sick. You cannot infer that because someone was exposed and had a runny nose, or threw up, or had diarrhea, or that someone with a horrible health history like Ms. McFarland was exposed and then got sicker, if we take her case at face value, that this product was defective.

The notion that a jury can infer that it was at a particular Isomalathion level because someone, after spraying, claims to have gotten sick is ludicrous. It defies logical reasoning.

I go back to, with or without Dr. Matson and everyone else, none of these lawyers has yet told you about a scintilla of evidence of causation, that the defect caused the injury, that some qualified expert can say, either generally or specifically, that because of elevated Isomalathion, Ms. McFarland was more sick than she would have been, Courtney Anolfo had three seizures instead of

* * *

[111] MR. MCMINN: Barbara McFarland, Courtney Anolfo –

THE COURT: You don't have to announce them. As to each and every Plaintiff you're making that same motion and it's denied for the same reasons.

MR. MCMINN: Okay, Your Honor. And with regard to granting Defendants' Motion for Summary Judgment, is that based upon your excluding Dr. Matson?

THE COURT: Yes, it is.

MR. MCMINN: Okay.

THE COURT: Yes, it is. I'm not going to draw that distinction that you urged me to make, Mr. Varner. I'm not so sure I abide in its totality, but without Dr. Matson there is just a complete and total absence of causation.

MR. MCMINN: That causation would be based upon the physicians who allegedly relied on him who cannot come in here and testify to a differential diagnosis relating the illness to the exposure.

THE COURT: Yes. I mean, let's face it, you laid out in your papers how you structured your causation,

Matson, toxicologists, treating physicians and examining physicians. The foundation is Matson. If HE'S gone, they're gone.

MR. MCMINN: Okay.

THE COURT: I can't make it any clearer.

MR. MCMINN: Judge, to bring back up the other set

* * *

(2)

No. 05-1

Supreme Court, U.S.
FILED
AUG 29 2005
OFFICE OF THE CLERK

In The

Supreme Court of the United States

BARBARA MCFARLAND, *et al.*,

Petitioners,

v.

CHEMINOVA, INC.; CHEMINOVA A/S; and AURIGA INDUSTRIES A/S,

Respondents.

On Petition For A Writ Of Certiorari To The United States Court Of Appeals For The Eleventh Circuit

RESPONDENTS' BRIEF IN OPPOSITION

KNOPIKVARNERMOORE
JOSEPH H. VARNER
406 S. Morgan Street
Tampa, FL 33602
(813) 221-3131

HOLLAND & KNIGHT LLP
CHRISTOPHER G. KELLY
195 Broadway, 24th Floor
New York, NY 10007
(212) 513-3200

HOLLAND & KNIGHT LLP
STACY D. BLANK
Counsel of Record
P.O. Box 1288
Tampa, FL 33601
(813) 227-8500

Counsel for Respondents

COCKLE LAW BRIEF PRINTING CO (800) 225-6964
OR CALL COLLECT (402) 342-2831

QUESTIONS PRESENTED

1. Whether differential diagnosis evidence, even if admissible under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), is sufficient, standing alone and in the absence of any other evidence establishing causation, to prove legal causation in a strict products liability case or a negligence-based products liability case?

2. Whether the petitioners' differential diagnosis evidence indicated that petitioners' injuries were caused by defective Fyfanon®?

PARTIES

The petitioners in this matter are Barbara McFarland; Gino Gavoni, Sr. and Lisa Gavoni, both individually and as parents and guardians of Victoria Gavoni and Gino Gavoni, Jr., minors; Michael Anolfo, individually and as parent and guardian of Courtney Anolfo, a minor; Angelina Des Autelles; and Mark Knierim.

The respondents are Cheminova, Inc.; Cheminova A/S; and Auriga Industries A/S. For convenience, the respondents are referred to collectively in this Brief in Opposition as "Cheminova."

CORPORATE DISCLOSURE STATEMENT

Respondent Auriga Industries A/S does not have a parent corporation and no publicly-held company owns more than 10% of its stock. Auriga Industries A/S is the parent corporation of respondent Cheminova A/S and owns all of its stock. Cheminova A/S is the parent corporation of respondent Cheminova, Inc. and owns all of its stock.

TABLE OF CONTENTS

	Page
QUESTIONS PRESENTED	i
PARTIES	ii
CORPORATE DISCLOSURE STATEMENT	iii
TABLE OF CONTENTS	iv
TABLE OF AUTHORITIES	v
STATEMENT OF THE CASE	1
REASONS FOR DENYING THE PETITION	5
I. The Eleventh Circuit Considered The Sufficiency Of Differential Diagnosis Evidence, Not Its Admissibility	5
II. The Petitioners' Differential Diagnosis Evidence Does Not Establish That Defective Fyfanon® Caused The Petitioners' Injuries	7
CONCLUSION	10

TABLE OF AUTHORITIES

Page

Cassissi v. Maytag Co., 396 So. 2d 1140 (Fla. 1st DCA 1981) 3

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993) 3, 5, 6

Westberry v. Gislaved Gummi AB, 178 F.3d 257 (4th Cir. 1999) 6

STATEMENT OF THE CASE

In 1997, Florida declared an agricultural emergency following the discovery of the mediterranean fruit fly in central Florida. (App. 3a).[1] To protect Florida's agricultural industry, the Florida Department of Agriculture and Consumer Services ("FDACS") and the United States Department of Agriculture ("USDA") engaged in a joint emergency response to the discovery. (*Id.*). With the express permission and approval of the United States Environmental Protection Agency ("EPA"), the FDACS and USDA together decided to combat the medfly with aerial and ground spraying of malathion mixed with a protein bait ("medfly spray") over a five-county area in central Florida. (*Id.*).

The FDACS and USDA determined the contents of the medfly spray, the volume of medfly spray applied per acre, the duration of the spraying program, the areas to be sprayed or re-sprayed, who would apply the spray, the dates and times of spraying, and the nature and extent of the notices and warnings provided to local governments and members of the public in the affected areas. (R-75-¶20). The FDACS and USDA were also responsible for obtaining the ingredients and mixing the medfly spray. (R-75-¶¶19-20). The FDACS and USDA purchased the malathion used in the medfly spray from Cheminova, Inc. The malathion was manufactured by Cheminova A/S and

[1] References to the opinions below, attached as an appendix to the petition, will be cited as "(App. ___)." Other citations are to the record before the United States Court of Appeals for the Eleventh Circuit.

sold under the trade names Fyfanon® ULV and Fyfanon® Technical. (App. 3a).[2]

The petitioners claimed that they were injured as a result of their exposure to the medfly spray during the spraying program. (App. 3a). Because of the obstacles presented by the state and federal governments' operation and supervision of the spraying program, the petitioners asserted only claims for strict products liability, negligence, negligent infliction of emotional distress, and toxic trespass against Cheminova. (*Id.*). The petitioners' claims required, at a minimum, proof that 1) the Fyfanon® used in the medfly spray was defective and therefore unreasonably dangerous and 2) the defect caused the petitioners' injuries.

According to the petitioners, improper storage of the Fyfanon® for some period of time at higher than recommended temperatures caused chemical changes in the product, resulting in elevated levels of isomalathion, a by-product commonly found in malathion. (App. 4a). The petitioners contended that the presence of elevated levels of isomalathion rendered the Fyfanon® defective. (*Id.*). The petitioners, however, could not identify the level of isomalathion content at which Fyfanon® becomes defective and unreasonably dangerous, or toxic. (App. 7a). Further, the petitioners could not accurately establish the amount of isomalathion in the Fyfanon® at issue. (*Id.*). Finally, the appellants produced no evidence establishing that the allegedly excessive isomalathion in the Fyfanon® caused their injuries. (*Id.*). Not only did the petitioners fail

---

[2] Fyfanon® ULV and Fyfanon® Technical will be referred to collectively as "Fyfanon®."

to present evidence supporting their claims, the petitioners could not even articulate for the court their theory of the case. For example, the petitioners and their experts were not able to agree on the alleged defect in the Fyfanon®. The petitioners offered different arguments about the amount of isomalathion content necessary to render Fyfanon® defective. As a last resort, the petitioners attempted to rely on *Cassissi v. Maytag Co.*, 396 So. 2d 1140 (Fla. 1st DCA 1981) to support an inference of a product defect. *Cassissi* recognizes that the malfunction of a product during its normal operation may support an inference that the product was defective. In this case, however, the petitioners could not establish that the Fyfanon® malfunctioned. Fyfanon® is a pesticide. The fact that some people become ill after exposure to a pesticide does not establish that the pesticide is defective. In fact, the differential diagnosis testimony of one of the petitioners' experts, Dr. Leonard Cosmo, proved just that. Dr. Cosmo testified that he could not rule out that the symptoms described by petitioners McFarland, Knierim, Des Autelles, and the Gavonis were caused by a simple allergic or non-allergic irritative reaction to the medfly spray – and *not* by any defect in the Fyfanon®. (R.-564-140).

After a five-day *Daubert* hearing at which the petitioners offered the testimony of twelve expert witnesses, the petitioners failed to elicit evidence establishing the most basic elements of their claims – the existence of a defect in the product and an injury caused by that defect. At the conclusion of the *Daubert* hearing, the district court excluded the petitioners' primary expert Dr. Jack Matson. (App. 6a-7a).[3] Dr. Matson had been retained to offer an

[3] The petitioners do not challenge the exclusion of Dr. Matson.

opinion on the amount of isomalathion present in the Fyfanon®. (App. 4a). The court also excluded the testimony of the petitioners' other experts that relied on Dr. Matson's opinions in developing their own. (App. 7a). The court then granted summary judgment in favor of Cheminova on all of the petitioners' claims. (*Id.*). The court ruled that the petitioners failed to produce sufficient evidence on the issue of causation to survive summary judgment. (*Id.*).

On appeal, the United States Court of Appeals for the Eleventh Circuit affirmed the district court's decision. (App. 2a). The Eleventh Circuit upheld the exclusion of the expert witnesses, concluding that the district court had properly executed its gatekeeping function under *Daubert*. (*Id.*). The Eleventh Circuit further affirmed the district court's entry of summary judgment in favor of Cheminova. (*Id.*).

The Eleventh Circuit rejected the petitioners' arguments on every point. First, the court found that the petitioners failed to offer any reliable evidence establishing a defect in the product. (App. 13a). The court pointed out that the differential diagnosis testimony of the treating physicians, even if admissible, did not purport to establish that the Fyfanon® used in the medfly spray was defective. The court explained that without proof that the product was defective, the differential diagnosis testimony directed solely to the issue of causation was irrelevant. (App. 13a-16a). The petitioners failed to prove a critical element of their claims – a product defect. The court further concluded that, even if the petitioners could prove that the Fyfanon® was defective (or that they were entitled to infer the existence of a defect), differential diagnosis evidence, without additional evidence of causation, is insufficient to withstand a motion for summary judgment

on the issue of causation. (App. 16a-17a). Thus, the petitioners failed to offer sufficient evidence on both elements of their claims.

REASONS FOR DENYING THE PETITION

The Court should deny the petition because the questions presented by the petitioners were neither addressed nor decided by the United States Court of Appeals for the Eleventh Circuit in the decision below. As a result, the decision below does not conflict with the decisions of other United States Courts of Appeals cited by the petitioners.

I. The Eleventh Circuit Considered The Sufficiency Of Differential Diagnosis Evidence, Not Its Admissibility.

The petitioners have confused the issues in this case to create the appearance of a conflict that does not exist. The petitioners argue that the decision of the Eleventh Circuit in this case creates a 5-3 split among the circuits on the issue of whether differential diagnosis evidence is sufficiently reliable to be admissible under *Daubert*. Even a cursory reading of the Eleventh Circuit's opinion in this case, however, reveals that the Eleventh Circuit did not, as the petitioners suggest, rule that differential diagnosis evidence is not sufficiently reliable to be admissible under *Daubert*. In fact, the court recognized that "numerous federal courts have found differential diagnosis sufficiently

reliable to be admissible under *Daubert*."[4] (App. 16a-17a). The court then explained that, notwithstanding its admissibility under *Daubert*, differential diagnosis evidence, standing alone and in the absence of any other evidence establishing causation, is nonetheless insufficient to defeat a motion for summary judgment on the issue of causation. (App. 17a). The Eleventh Circuit ruled that, even if it is admissible under *Daubert*, differential diagnosis evidence is not sufficient, without more, to permit a rational trier of fact to conclude that a plaintiff has met its burden of proof on the issue of causation. As a result, the decision of the Eleventh Circuit in this case does not conflict with the cases cited by the petitioners.

All of the cases cited by the petitioners to demonstrate the purported conflict involve the issue of whether differential diagnosis evidence is admissible under *Daubert*. Similarly, the commentaries cited by petitioners discussing the conflict all address the admissibility of differential diagnosis evidence. The question of the admissibility of differential diagnosis evidence under *Daubert* is not the same as the issue of whether that evidence, once admitted, is sufficient to prove causation. Because the Eleventh Circuit concluded only "we have found in the context of summary judgment that differential diagnosis evidence by itself does not suffice for proof of causation" (App. 17a), the petitioners have identified no conflict involving the decision below.

---

[4] The Eleventh Circuit cited *Westberry v. Gislaved Gummi AB*, 178 F.3d 257 (4th Cir. 1999) in support. (App. 17a). Ignoring the Eleventh Circuit's favorable citation, the petitioners contend that the decision below conflicts with *Westberry*.